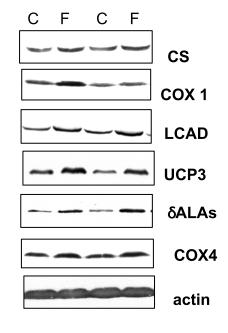
## **Supporting Information**

Hancock et al. 10.1073/pnas.0802057105



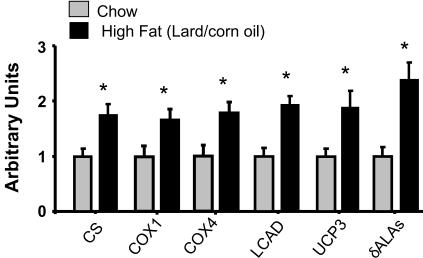


Fig. S1. A high-fat diet containing lard and corn oil induces an increase in skeletal muscle mitochondria. Western blot analysis of mitochondrial proteins from triceps muscle of rats fed the lard/corn oil diet for 4 wk. Values are means  $\pm$  SE for six muscles. \*, P < 0.05 for high fat vs. chow.

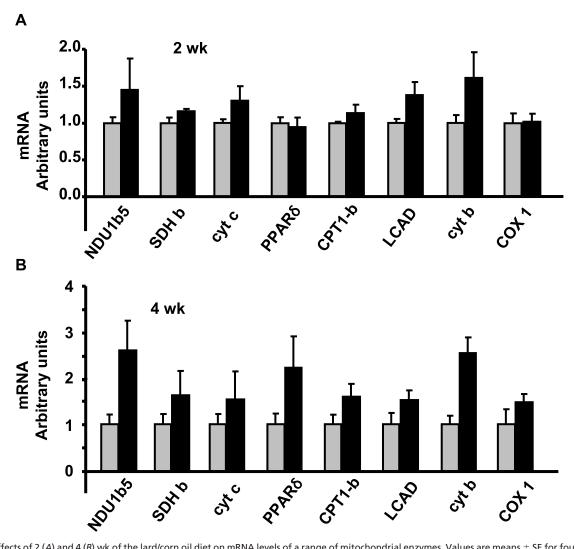


Fig. S2. Effects of 2 (A) and 4 (B) wk of the lard/corn oil diet on mRNA levels of a range of mitochondrial enzymes. Values are means  $\pm$  SE for four muscles per group.

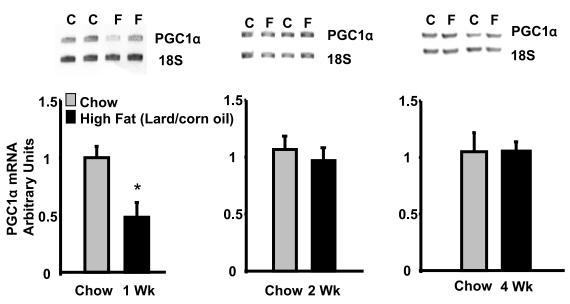


Fig. S3. A high-fat diet does not induce an increase in PGC-1 $\alpha$  mRNA in skeletal muscle. Effects of 1, 2, and 4 wk of a high-fat diet on PGC-1 mRNA level in triceps muscle. Values are means  $\pm$  SE for four muscles per group.

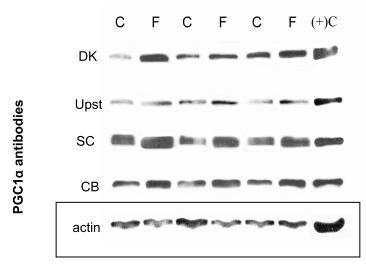


Fig. S4. Effects of 4 wk of a high-fat diet on PGC- $1\alpha$  protein expression in muscle. PGC- $1\alpha$  was measured by Western blot analysis using four different antibodies in triceps muscle of rats fed the flax/olive oil diet for 4 wk. C, control; F, high fat. Values are means for four to eight muscles per group.

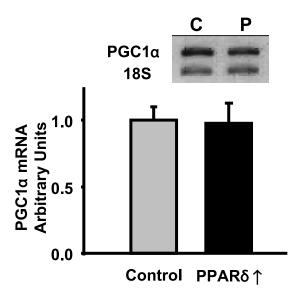


Fig. S5. PGC-1 $\alpha$  mRNA is not increased in muscles overexpressing PPAR $\delta$ . Values are means  $\pm$  SE for four muscles per group.